

## Claims

- [c1] A filament circuit resistance adjusting apparatus, for a filament circuit having a filament with a first resistance, said apparatus comprising a first resistor electrically coupled to the filament and having a second resistance, said first resistor adjusting the resistance of the filament circuit.
- [c2] An apparatus as in claim 1 wherein said first resistor is in series with or parallel to the filament.
- [c3] An apparatus as in claim 1 further comprising one or more resistors electrically coupled to said first resistor and further adjusting the resistance of the filament circuit.
- [c4] An apparatus as in claim 3 wherein said one or more resistors are in series with, parallel to, or are both in series with and parallel to said first resistor and the filament.
- [c5] An apparatus as in claim 1 further comprising:  
a circuit board electrically coupled to the filament and the first resistor;  
wherein said circuit board supports the first resistor.
- [c6] An apparatus as in claim 5 wherein the circuit board comprises a heat sink layer.
- [c7] An apparatus as in claim 5 further comprising a heat sink coupled to the circuit board and said first resistor.
- [c8] An apparatus as in claim 5 further comprising a resistor socket electrically coupled to said circuit board and said first resistor, wherein said first resistor plugs into said socket.
- [c9] An apparatus as in claim 5 further comprising a filament resistance adjusting apparatus socket electrically coupled to the filament and the circuit board, wherein said circuit board plugs into said socket.
- [c10] A filament resistance adjusting apparatus, for a first filament circuit having a first filament with a first resistance, said apparatus comprising:  
a circuit board electrically coupled to the first filament; and

a first resistor electrically coupled to said circuit board and the first filament and having a second resistance, said first resistor is in series with the first filament and adjusting the resistance of the first filament circuit.

- [c11] An apparatus as in claim 10 further comprising:  
a second filament having a third resistance; and  
a second resistor having a fourth resistance, said second resistor is electrically coupled to said second filament and said circuit board;  
said second resistor is in series with the second filament and adjusting the resistance of the second filament circuit.
- [c12] An imaging tube assembly having a filament circuit comprising:  
a cathode comprising a filament; and  
a filament circuit resistance adjusting apparatus comprising;  
a circuit board electrically coupled to the filament; and  
a first resistor electrically coupled to said circuit board and the filament and having a second resistance, said resistor adjusting the resistance of the filament circuit.
- [c13] An apparatus as in claim 12 further comprising:  
an encasing having a recessed portion;  
wherein said filament circuit resistance adjusting apparatus is positioned within said recessed portion.
- [c14] An apparatus as in claim 12 further comprising a filament circuit resistance adjusting apparatus socket electrically coupled to the filament and the circuit board, wherein said circuit board plugs into said socket.
- [c15] An apparatus as in claim 14 further comprising a cathode receptacle electrically coupled to said filament circuit resistance adjusting apparatus socket.
- [c16] An apparatus as in claim 12 further comprising a resistor socket electrically coupled to said circuit board and said first resistor.
- [c17] A method of adjusting resistance of a filament circuit having a filament with a first resistance, said method comprising electrically coupling a resistor having a second resistance to the filament.